

## CLAIMS

1. A glass composition comprising inorganic glass, characterized in that a volume ratio of an isotope of helium with a mass number of 3 to an isotope of helium with a mass number of 4 in the glass (0°C, 1 atm) is smaller than a volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 present in the atmosphere (0°C, 1 atm).

2. A glass composition according to claim 1, characterized in that the volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 in the glass is  $0.8 \times 10^{-6}$  or less (0°C, 1 atm).

3. A glass composition according to claim 1 or 2, characterized in that a total content of the isotope of helium with a mass number of 4 and the isotope of helium with a mass number of 3 in the glass is  $5.0 \times 10^{-5}$  to 2  $\mu\text{l/g}$  (0°C, 1 atm).

4. A glass composition according to any one of claims 1 to 3, characterized in that the glass composition comprises a multicomponent oxide glass.

5. A glass composition according to any one of claims 1 to 4, characterized in that the glass composition comprises a silicate

glass.

6. A glass composition according to any one of claims 1 to 5, characterized in that a transmittance for a thickness of 1.0 mm is 99.9% or less with respect to a light beam having a predetermined wavelength within a wavelength range of 200.0 nm to 1,050.0 nm.

7. A glass composition according to any one of claims 1 to 6, characterized in that the glass composition is sealed with a member composed of one material selected from the group consisting of a glass, a ceramic, and a metal under heat.

8. A glass composition according to any one of claims 1 to 7, characterized in that the glass composition is obtained as a result of crystallization inside glass and/or on a surface of the glass.

9. A method of producing a glass article comprising the steps of:

melting a glass raw material by heating;

homogenizing molten glass;

forming the homogenized molten glass into a predetermined shape; and

cooling the shaped formed glass article to room temperature,

wherein, in at least one of the step of melting a glass raw material by heating and the step of homogenizing molten glass, a helium gas is brought into contact with the molten glass so that helium is dissolved in a glass article in such a manner that a volume ratio of an isotope of helium with a mass number of 3 to an isotope of helium with a mass number of 4 (0°C, 1 atm) is smaller than a volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 present in the atmosphere (0°C, 1 atm).

10. A method of producing a glass article according to claim 9, characterized in that helium is dissolved in a glass article in such a manner that the volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 in the glass article is  $0.8 \times 10^{-6}$  or less (0°C, 1 atm) and a total content of the isotope with a mass number of 4 and the isotope with a mass number of 3 is  $5.0 \times 10^{-5}$  to 2  $\mu\text{l/g}$  (0°C, 1 atm).

11. A method of producing a glass article according to claim 9 or 10, characterized in that molten glass is melted and homogenized while the molten glass is evaluated for degree of homogeneity by measuring a volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 in the molten glass, a formed glass article, or a glass article.

12. A method of producing a glass article according to any one of claims 9 to 11, characterized in that the step of homogenizing molten glass is intended for homogenizing the molten glass in such a manner that a volume ratio of the isotope of helium with a mass number of 3 to the isotope of helium with a mass number of 4 in a glass article is in a range of  $1.0 \times 10^{-9}$  to  $0.8 \times 10^{-6}$ .